

Claims:

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1. Rotor assembly for an electrical machine, including
a body of generally cylindrical shape having an inner opening,
wherein slots are provided in the body, the slots extending from the inner opening
towards the outer periphery of the body;
10 permanent magnets disposed in said slots;
wherein at least one of the slots comprises an end section near the outer periphery of
the body having an area of enlarged width.

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2. Rotor assembly according to claim 1 wherein the slots are closed at said end sections
15 near the outer periphery of the body, and the slots include recesses creating said areas
of enlarged width near the outer periphery.

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3. Rotor assembly according to claim 1 wherein the permanent magnets terminate short
of said area of enlarged width.

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4. Rotor assembly according to claim 1 wherein the permanent magnets extend into said
area of enlarged width.

5. Rotor assembly according to claim 1 wherein said end section is filled by a medium
25 having no magnetic properties.

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6. Rotor assembly according to claim 1 wherein the rotor body comprises a magnetic
core.

7. Rotor assembly according to claim 1 wherein the slots including the magnets extend
approximately radially through said body.

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8. Rotor assembly according to claim 1, wherein said inner opening is configured for
coaxially mounting the body on a shaft.

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9. Rotor assembly according to claim 8 wherein the body is mounted on the shaft via a hub.

10. Rotor assembly according to claim 9 wherein the hub is of a non-magnetic material.

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11. Rotor assembly according to claim 1 wherein the outer periphery of the body has a convex or concave shape between two adjacent permanent magnets.

12. Permanent magnet motor comprising

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a rotor assembly for an electrical machine, including a body of generally cylindrical shape having an inner opening, wherein slots are provided in the body, the slots extending from the inner opening towards the outer periphery of the body, permanent magnets disposed in said slots, wherein at least one of the slots comprises an end section near the outer periphery of the body having an area of enlarged width,

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and a stator cooperating with said rotor assembly.